Unit Leadership Development Program
Facilitator Guide

Topic	Apollo 13 - “A Successful Failure”
Movie	Apollo 13
Source	DVD or VHS
Cost	About $17.00 new
Time	Running time on the video is 2 hours and 20 minutes. Lesson plan is devised to provide you the opportunity to watch it all at once and review it during a 30 minute review or it can be broken into Scenes and watched over a series of 30 minute sessions.
Description	From http://www.amazon.com NASA's worst nightmare turned into one of the space agency's most heroic moments in 1970, when the *Apollo 13* crew was forced to hobble home in a disabled capsule after an explosion seriously damaged the moon-bound spacecraft. Tom Hanks, Kevin Bacon, and Bill Paxton play (respectively) astronauts Jim Lovell, Jack Swigert, and Fred Haise in director Ron Howard's intense, painstakingly authentic docudrama. The *Apollo 13* crew and Houston-based mission controllers race against time and heavy odds to return the damaged spacecraft safely to Earth from a distance of 205,500 miles. Using state-of-the-art special effects and ingenious filmmaking techniques, Howard and his stellar cast and crew build nail-biting tension while maintaining close fidelity to the facts. The result is a fitting tribute to the *Apollo 13* mission and one of the biggest box-office hits of 1995. *--Jeff Shannon* *Great WWW link overview of the Apollo 13 Mission:* http://liftoff.msfc.nasa.gov/Academy/History/APOLLO-13/mission-report.html
Competencies Covered	Technical Proficiency, Team Building, Conflict Management, Decision Making & Problem Solving, Effective Communications, Vision Development and Implementation

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Recommended Setting:	"Brown bag" discussion items Mess Deck training
Recommended Time:	Running time on the video is 2 hours and 20 minutes. Lesson plan is devised to provide you the opportunity to watch it all at once and review it during a 30 minute review or it can be broken into Scenes and watched over a series of 30 minute sessions.
Recommend Group Size:	Small groups with one facilitator Opportunity to recap with larger groups after initial discussions
Prerequisite Actions:	Recommend the facilitator review the movie and lesson plan prior to the discussion group. Recommend the Facilitator review the Competencies and associated behaviors. They will provide a good connection to the talking points provided in the video.
Instructor Tips:	The DVD version has extra material that can assist you in understanding the crisis situation. Because this event occurred before many members were born, it would be helpful to give the members a context and perspective to base this event on. It may be helpful to review the state of the nation with regards to the space race with Soviet Union and the importance of the mission to the moon. Although the nature of this event is unique, it is still a valuable case study for leadership, problem solving, and team work. While managing stress is not a core competency, there are lessons learned on how to manage and perform during a crisis. Remind participants that this is an actual event, which is made unique by the historical context of the times. Ask them what lessons they learned from this event and how they can use these lessons at their unit or throughout their career.

Gain Attention and Identify Team Leadership Types

Event	Instructor Notes	Participant Activity
Group Discussion	Prepare the members before viewing the movie by giving them a historical context of the space program, the challenges the Apollo program was facing and the political issues of the time. Personalize the event to something at your unit or a previous experience at another unit. You may want to replay chapters during discussions to prepare and prompt members for discussion points.	Most members have probably seen Apollo 13. Ask them to provide their thoughts on how Apollo 13 serves as a leadership video. Members can submit "reflections" on what impressed them, what lessons they took away from the movie the first time they saw it and what they may be looking to take away from today's learning opportunity.

Stimulate recall of prior learning

Event	Instructor Notes	Participant Activity
Group Discussion	Time to revisit recent activities, discussions, or events at your unit that relate to the topics you'll be covering in this training opportunity.	Solicit input from the participants as appropriate to stimulate recall.

Present the Content & Provide Learning Guidance

Apollo 13 touches many if not all the Leadership Competencies. In an effort to focus the scope of the training the following competencies were identified as those that were consistently demonstrated throughout the movie:

Leading Self:
Technical Proficiency

Leading Others:
Effective Communications
Team Building

Leading Performance and Change:
Conflict Management
Creativity and Innovation
Decision Making and Problem Solving
Vision Development and Implementation

This lesson plan can be used in two different ways depending on how much time you can invest at a time. The first section is set up for a review of the movie scene by scene. The second lesson plan is a review of the movie after watching the entire movie and then facilitating a discussion of the various scenes in the movie. If you choose to use the second lesson plan refer to the PowerPoint attachment in the ULDP. The Scene by Scene lesson plan is provided in the following pages.

Scene 1 - Setting the Vision (opening through the end of the backyard scene after the party)

Event	Instructor Notes	Participant Activity
Group Discussion	This scene fits best with the competencies of: • Vision Development & Implementation The opening scene is a good example of the vision of the space race. This vision was inspired by President Kennedy: "I believe that this nation should commit itself to achieving the goal, before this decade is out, of landing a man on the moon and returning him safely to Earth." And was culminated with Neil Armstrong's words as he took his first step: "One small step for man. One giant step for mankind." As Tom Hanks states in the movie, "Columbus, Lindberg, and Armstrong; it is not a miracle for man to walk on the moon, we just decided to go."	Ask the participants what the mission of NASA was? Was it clear, concise, and achievable? Ask the participants to define what their unit vision is. What goals does the unit have? Do the members of the unit understand the vision and mission and how they contribute to it? Ask the question … see what people think. Ask the members if they were ever influenced by leaders who presented a vision and made things happen because of their decisions (share examples).

Scene 2 - Practice Practice Practice (scene ends with crew going back into the LEM)

Event	Instructor Notes	Participant Activity
Group Discussion	This chapter fits best with the competencies of: • Team Building • Technical Proficiency Note how the astronauts trained and practiced the same simulations in the simulator over and over. Ken Mattingly is not completely satisfied with his performance and requests another simulation exercise so they could get it "right". The team spent three hours in the simulator and needed to be up early in the morning, yet Jim and Fred were willing to support Ken's request to get back in and practice some more.	Ask participants if they ever felt they practiced a maneuver "enough" or trained "enough" on a certain procedure or drill. How do members deal with the fact that they may know their job or position, but they must continue to train or practice to get the "new person" qualified? What ideas does your crew/team have for influencing and motivating others to practice and train more effectively as a team at the unit?

Scene 3 - Measles (ends when Jim Lovell says "Lets do it again!" and the team goes back in the LEM)

Event	Instructor Notes	Participant Activity
Group Discussion	This Scene fits best with the competencies of: • Decision Making Ken Mattingly gets scrubbed from the Apollo 13 crew because he was exposed to the measles. This presents a conflict for the Mission Commander who must replace Mattingly with a new crew member (Jack Swigert) who has not trained with the team. Jim Lovell was confronted with a tough decision. He sacrificed his relationship with his shipmate and crew member to save the flight. Jim had a right vs. right decision to make - did he make the right decision, good opportunity for discussion on this one scene.	What challenges did the Mission Commander face when a shipmate was going to be pulled from the mission? Did Jim make the right decision to go ahead with pulling Ken? Did Jim make the decision to save his own trip to the moon? What were some possible problems that might emerge from having a new crew member join a team so soon before launching? Solicit examples of how leaders can gain cooperation and commitment from others after tough decisions are made.

Scene 4 - Go for Launch! (ends with wives being interviewed in the parking lot)

Event	Instructor Notes	Participant Activity
Group Discussion	This chapter fits best with the competencies of: • Technical Proficiency • Teamwork This scene primarily focuses on the launch sequence and the number of personnel involved in getting the three men into space. Jim lovell states at the end of the movie; "1,000's of people worked to bring the three of us home!" The same is true of the thousands of people it took to get the mission to the "Go for Launch" point. What missions, evolutions, tasks occur at your unit that take "thousands" of people to make it a success. Frequently, many folks must contribute to the success of everything we do day in and day out, including our families. Highlight some of these for the participants and let them build on the concept of how we all contribute to the success of the Service.	"What elements at our unit contribute to the day in and day out mission accomplishment?" Does the crew understand how their efforts contribute to the greater good for the Coast Guard and the country. What role does the support of families play in mission accomplishment?

Scene 5 - Houston we have a problem! (ends with Mattingly in his room watching TV)

Event	Instructor Notes	Participant Activity
Group Discussion	This chapter fits best with the competencies of: • Technical Proficiency • Teamwork • Effective Communications Note how when the oxygen tank failed, the crew handled the crisis in a calm manner. Houston had the same attitude, "Let's remain calm and work the problem." Communications was key in Houston. Gene Krantz asked his folks to focus on "what works on the spacecraft." He then listened to his junior personnel who were the technical experts when he acted on the recommendation to shut down the fuel cell. There is a glimpse of poor communications as well. When Jim's wife calls NASA to find out the details regarding the electrical failure. NASA's response fails to consider Jim's wife's needs and concerns and she finally tells them to "stop the NASA BS!" Jim Lovell demonstrates the importance of the team, even as the mission commander he relies on others to check his math to ensure they all get the right answer.	How would we react in a crisis? Does everyone know their roles and responsibilities? Ask the participants if they feel that their members are proficient in their skills. Do members feel confident they can operate and solve problems? What methods are used to communicate about decisions and management issues? What would improve communications? Ask the participants how they rate communication skills in their unit. What works? What could be improved (formal comms, informal comms, e-mail, messages, written comms, etc.) Do supervisors always rely on the inputs of others? How could they do a better job of listening to others. What could junior personnel do to help ensure the boss always gets the best information to make a decision (see Lovell's conversation with Houston on the math).

Scene 6 - Failure is not an option! (ends with request from the News reporters)

Event	Instructor Notes	Participant Activity
Group Discussion	This chapter fits best with the competencies of: • Decision Making & Problem Solving • Vision Development and Implementation Note how the new mission changed to getting the crew home. Lovell challenges his crew to determine what the mission is and then goes about defining roles and responsibilities to get them where they want to go - home. Back on earth Krantz lets everyone know that "Failure is not an option!" Both Krantz and Lovell display exceptional vision by focusing everyone's efforts on the goal, even in the middle of the turmoil and every possible hurdle, Lovell and Krantz come across as two men focused on mission accomplishment. Krantz's vision influences the development of the "square peg in the rough hole" to solve the CO2 problem. It is also displayed in the use of the simulator to develop a plan for powering up the space craft.	Ask the members if the unit is able to stay focused on the mission day in and day out even with the distractions that come up in our daily lives? Focus on the plusses and minuses in the workplace that either allow the unit to remain focused or discuss those challenges that impact the unit's ability to remain focused (keep the discussion positive - frequently individuals can use a discussion like this to shift blame). What is the value to a unit when leaders step up and define the goal? Discuss events in your workplace when the unit was focused on mission accomplishment, have the participants identify or list what happened positively at the unit when everyone was on the same page. Compare that to an event when there were challenges because not everyone was on the same page. What can be done in the future to ensure better communication and alignment of the vision at the unit. Participants can be challenged to think of one new creative or innovative technique that they can implement in their unit.

Chapter 7 - Tension in the LEM (ends with CO2 levels coming back down to normal)

Event	Instructor Notes	Participant Activity
Group Discussion	This chapter fits best with the competencies of: • Conflict Management • Teamwork Invariably when people spend a good deal of time in a stressful situation there is going to be conflict (the LEM or possibly a Coast Guard Cutter). Fred and Jack begin to get on each other and Fred doubts whether or not Jack read the gauges prior to stirring the tanks. Jim Lovell tries to deconflict the crew, but Jack's reactions show that he feels like an outsider to the other two. The solution to the CO2 problem draws the team together and forces them to succeed as a team.	How does your unit deal with conflicts? Do you identify the conflicts, address the root causes and work on solutions? How did solving the CO2 issue help to bring the Apollo team together? How does your unit welcome new members into the team? Do you provide new members the opportunity to contribute early on? What can you do to enhance the teamwork at your unit when new members report on board?

Scene 8 - Re-entry (take it to the end of the movie)

Event	Instructor Notes	Participant Activity
Group Discussion	This chapter fits best with the competencies of: • Decision Making & Problem Solving The limited power situation resulted in needing to be creative in solving the problem in getting the crew back to earth. To solve this problem, Krantz wanted the engineers to talk to everyone involved in the production process, including the folks on the assembly line. Additionally, they call Ken Mattingly back to run simulations in the simulator with different parameters of power and developing a sequential process. Ken Mattingly is working in the simulator, testing protocols for power usage that the Apollo crew can use to fly home. He is asked by Houston to take a break. His response was, "If they don't get a break, I don't get one." Ken Mattingly is running tests in the simulator to see if he can run with the available power and still get the crew home. He gets an idea to reverse the flow of amps into Aquarius and solves the amp/electrical power problem. Finally, when the crew arrived home safely everyone involved celebrated their victory. Granted there was a great deal of stress, but Krantz stated it well "this will be our finest hour!"	Has anyone faced a challenge where they have to come up with a solution that at first seems impossible? How did you come up with the solution? What problem solving process did you utilize? The CO2 solution was gotten to in a very different way than the power problem. What were the plusses and minuses to the two problem solving methods. What would have happened if the team working on the power up sequence utilized the process that the CO2 team utilized? Why is it valuable to celebrate your victories whether they are big or small? Does your unit celebrate victories? What can you do to better celebrate your victories?

Assess Performance

Event	Instructor Notes	Participant Activity
Individual Answers to specific questions from the facilitator	Here you want to sum up the major points of your discussion regardless of the scenes covered. Ask the participants to restate some of the key points and ensure you clear up any questions prior to closing out the discussion.	Select individual participants to answer the questions you pose about the scenes covered.

That's it!!! Look to provide a wrap up on the topic that hits on the high points of your discussion(s) and encourage feedback on the topic.